

STATEMENT OF BASIS (AI No. 41556)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0117102 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Francis Drilling Fluids, Ltd.
FDF - Fourchon Plant
Post Office Box 1694
Crowley, Louisiana 70527-1694

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Michelle Bickham

DATE PREPARED: September 15, 2008

1. PERMIT STATUS**A. Reason For Permit Action:**

Permit reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. LPDES permit - LA0117102
LPDES permit effective date: May 1, 2003
LPDES permit expiration date: April 30, 2008

C. Date Application Received: August 4, 2008

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - drilling mud sales and service facility**

Francis Drilling Fluids, Ltd., Fourchon Plant is an existing facility that mixes, stores, and transports drilling fluids. The facility pressure washes the inside and outside of trucks as well as tank barges used to transport the drilling fluids. The facility's description of their processes were verified with Craig Cormier on September 15, 2008.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: III*
3. Wastewater Type: II
4. SIC code: 1389

* This facility has an SIC Code of 1389 with a corresponding Complexity Type of III (internal cleaning). However, because of the low volume of washwater discharged, the points have been BPJ'ed to 10.

C. LOCATION - 180 17th Street, Golden Meadow, Lafourche Parish
Latitude 29°07'09", Longitude 90°12'14"

Statement of Basis for
Francis Drilling Fluids, Ltd., FDF - Fourchon Plant
LA0117102, AI No. 41556
Page 2

3. OUTFALL INFORMATION

Outfall 001

This discharge from this outfall has ceased, and the system associated with it has been removed; therefore, this outfall has been removed from the permit.

Outfall 002

Discharge Type: treated sanitary wastewater
Treatment: mechanical sewer treatment plant with separation and aeration
Location: at the point of discharge from the mechanical sewer treatment plant located on the northwest side of the facility (Latitude 29°07'10", Longitude 90°12'14")
Flow: 120 gpd
Discharge Route: local drainage thence to Bayou Lafourche

Outfall 003

Discharge Type: external and internal truck washwater and tank barge washwater
Treatment: initial solids and hydrocarbon separation; water is then run through a carbon vessel, organoclay canister, and undergoes additional solids separation
Location: at the point of discharge from the treatment plant located on the northeast corner of the facility (Latitude 29°07'15", Longitude 90°12'13")
Flow: 150 gpd
Discharge Route: local drainage thence to Bayou Lafourche

4. RECEIVING WATERS

STREAM - local drainage thence to Bayou Lafourche

BASIN AND SEGMENT - Barataria Basin, Segment 020403*

*NOTE: This facility's front gate is located in Subsegment 020905; however, the facility discharges to Subsegment 020403.

Statement of Basis for
Francis Drilling Fluids, Ltd., FDF - Fourchon Plant
LA0117102, AI No. 41556
Page 3

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
e. oyster propagation*

** Oyster Propagation is listed as a designated use of Segment 020403. However, this designated use is applicable only if the discharge is directly into the named waterbody and not into a tributary or distributary of the waterbody, per LAC 33:IX.1111.A.

5. TMDL/303(d) WATERBODIES

Subsegment 020403 is not listed on LDEQ's Final 2006 303(d) List as impaired and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDL's.

6. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below

Changes from previous permit:

- Outfall 001 has been removed from the permit.
- Additional requirements regarding barges have been added to Part II.
- The Fecal Coliform limitation for Outfall 002 has been changed from 43 col/100 mL to 400 col/10 mL.
- The monitoring frequency for Outfall 003 has been changed from 1/quarter to 1/month and the description has been changed from "external and internal truck washwater and equipment washwater" to "external and internal truck washwater and tank barge washwater".

7. COMPLIANCE HISTORY/COMMENTS

There have been no recent inspections at the facility.

Statement of Basis for
Francis Drilling Fluids, Ltd., FDF - Fourchon Plant
LA0117102, AI No. 41556
Page 4

A review of DMR's for the past two years was conducted for the facility. Samples were not submitted for either Outfall 001 or 002. (As per the facility, Outfall 001 has been removed from the facility, and Outfall 002 does not discharge.) Below is a list of the excursions found for Outfall 003.

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	<u>Reported Value</u>	<u>Permit Limits</u>
3/08	TSS	003	244 mg/L	45 mg/L
12/07	COD	003	350 mg/L	200/300 mg/L
9/07	Oil & Grease	003	119 mg/L	15 mg/L
3/07	COD	003	637 mg/L	200/300 mg/L
9/06	TSS	003	132 mg/L	45 mg/L

8. EXISTING EFFLUENT LIMITS

Outfalls 001 and 002 - treated sanitary wastewater

Parameter	LPDES	
	Monthly Average	Weekly Average
Flow - gpd	Report 1/6 mos Est.	Report 1/6 mos Est.
BOD ₅	---	45 mg/L 1/6 mos Grab
TSS	---	45 mg/L 1/6 mos Grab
Fecal Coliform	---	43 col/100 mL 1/6 mos Grab
pH	6.0 - 9.0 s.u. 1/6 mos Grab	

Statement of Basis for
 Francis Drilling Fluids, Ltd., FDF - Fourchon Plant
 LA0117102, AI No. 41556
 Page 5

Outfall 003 - external and internal truck washwater and equipment washwater

Parameter	LPDES	
	Monthly Average	Daily Maximum
Flow - gpd	Report 1/quarter Est.	Report 1/quarter Est.
TSS	---	45 mg/L 1/quarter Grab
COD	200 mg/L 1/quarter Grab	300 mg/L 1/quarter Grab
Oil and Grease	---	15 mg/L 1/quarter Grab
pH	6.0 - 9.0 s.u. 1/quarter Grab	
Soaps & Detergents	Report 1/quarter Grab	---

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 020403 of the Barataria Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007, from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

Statement of Basis for
Francis Drilling Fluids, Ltd., FDF - Fourchon Plant
LA0117102, AI No. 41556
Page 6

10. HISTORIC SITES

The discharge is from an existing facility location which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

13. STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

An SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 1389 are considered to have storm water discharges associated with industrial activity.

The SWP3 shall be prepared, implemented, and maintained within six(6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Part II of the permit).

Statement of Basis for
Francis Drilling Fluids, Ltd., FDF - Fourchon Plant
LA0117102, AI No. 41556
Page 7

Rationale for Francis Drilling Fluids, Ltd.

1. Outfall 002 - treated sanitary wastewater (estimated flow is 120 gpd)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Weekly Avg (mg/l)	<u>Reference</u>
Flow	Report:Report	Similar discharges (BPJ), LAG530000
BOD ₅	---:45 mg/L	Similar discharges (BPJ), LAG530000
TSS	---:45 mg/L	Similar discharges (BPJ), LAG530000
Fecal Coliform	---:400 col/100mL*	Similar discharges (BPJ), LAG530000
pH	6.0 - 9.0 s.u.	Similar discharges (BPJ), LAG530000

Treatment: mechanical sewer treatment plant including separation and aeration

Monitoring Frequency: 1/6 months for all parameters at the point of discharge from the mechanical sewer treatment plant located on the northwest side of the facility

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other industrial facilities and the Class I Sanitary General Permit, LAG530000. NOTE: The fecal coliform limit has been changed from 43 col/100 mL to 400 col/100 mL as this discharge is not directly into a named waterbody (LAC33.IX.1111.A). As per LAC33.IX.2707.L.2.a.ii.(b), this is not considered antibacksliding as the previous permit had a technical mistake.

*Daily Max

2. Outfall 003 - external and internal truck washwater and tank barge washwater (estimated flow is 150 gpd)

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow	Report:Report	
COD	200:300	Similar discharges; previous permit
TSS	---:45	Similar discharges; previous permit
Oil & Grease	---:15	Similar discharges; previous permit
pH	6.0 - 9.0 s.u.	Similar discharges; previous permit
Soaps & Detergents	Report:---	Similar discharges; previous permit

Treatment: initial solids and hydrocarbon separation; water is then run through a carbon vessel, organoclay canister, and undergoes additional solids separation

Monitoring Frequency: 1/month for all parameters at the point of discharge from the treatment plant located on the northeast corner of the facility

Statement of Basis for
Francis Drilling Fluids, Ltd., FDF - Fourchon Plant
LA0117102, AI No. 41556
Page 8

Limits Justification: Limits based on current guidance for similar discharges from other facilities and the previous permit. The monitoring frequency for this outfall is being increased from 1/quarter to 1/month as there were numerous excursions for the outfall. NOTE: Residual hauled fluids known as "heels" are not authorized to be discharged through this outfall. The "heels" are subject to the no discharge requirement for drilling fluids as addressed in the effluent guidelines and standards for the Coastal Subcategory of the Oil and Gas Extraction Point Source Category (40 CFR 435).

This facility is not subject to 40 CFR 442, Transportation Equipment Cleaning Point Source Category. As per 40 CFR 442.1(b)(3), facilities discharging less than 100,000 gallons per year are not subject to these guidelines.

BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.